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UNIFORM EXAMINATION QUESTIONS FOR COMMISSIONERS' CERTIFICATES.

NEW YORK STATE DEPARTMENT OF PUBLIC INSTRUCTION.

SECOND AND THIRD GRADES.

[August 16, 1892.]

ARITHMETIC.

1. Using proper abbreviations or symbols, write (*a*) seventeen acres, three square chains, seventy-seven square links; (*b*) five pounds, twelve shillings, eight pence.

2. A farmer delivered at a warehouse four loads of wheat weighing respectively 2,113 pounds, 2,310 pounds, 2,270 pounds, and 2,091 pounds. How much should he have received at $1.08 per bushel?

3. B's tax was $86.2755 when the rate was 7.635 mills on a dollar. What was the assessed valuation of his property?

4. The difference in longitude between two places being 9° 34′ 25″, what is the difference in time?

5. Reduce .36225 bushels to quarts.

6. Divide $(3\frac{1}{2}+7\frac{1}{4})$ by $(8\frac{1}{7}\times\frac{5}{19})$.

7. In what time will $1,350 earn $31.88 at five per cent. per annum?

8. Write in Arabic notation (*a*) LVIII; (*b*) DCXLI; (*c*) MDCCCXCIX; (*d*) MLIV.

9. Required the cost of 35 pieces of scantling 18 feet long, 4 inches wide, and 2 inches thick, at $14 per M, board measure.

10. A has $3\frac{1}{2}$ pecks of peas, and B has $2\frac{1}{2}$ bushels. Find the ratio of A's to B's.

GEOGRAPHY.

1. Name three subjects of which physical geography treats.

2. The earth is an oblate spheroid. Define oblate spheroid.

3. Give an illustration of the utility of ocean currents.

4. Name in order from north to south five large indentations of the eastern coast of the United States.

5. Name a group of mountains in the Appalachian system in each of the following states, respectively: (*a*) New Hampshire; (*b*) Vermont; (*c*) New York; (*d*) Pennsylvania; (*e*) Virginia.

6. Name one river emptying into the Atlantic Ocean from each of the following states, respectively: (*a*) Connecticut; (*b*) New York; (*c*) Maryland; (*d*) North Carolina; (*e*) Florida.

7. What countries join France on the east?

8. (*a*) Name the two points at which North America and Asia approach nearest to each other. (*b*) What water separates them?

9. Name (*a*) the extreme southwestern county; (*b*) the extreme northeastern county of New York; and (*c*) state one point of interest in case of each.

10. What form of government has each of the following, respectively: (*a*) Portugal? (*b*) Spain? (*c*) Sweden? (*d*) Greece? (*e*) Switzerland?

CIVIL GOVERNMENT.

1. We say that the town government is virtually that of a pure democracy. Why?

2. According to the state constitution who are qualified to vote upon amendments to it?

3. (*a*) In what courts are controversies between two or more states settled? (*b*) By what authority is this done?

4. Why are export duties forbidden by the United States Constitution?

5. (*a*) To provide for and maintain a navy belongs to which one of the three divisions of the national government? (*b*) Under the direction of what cabinet officer are the naval appropriations expended?

6. To pass a bill over the President's veto requires what majority? How must the vote be taken?

7. What are the requisite qualifications for the office of United States senator as to (*a*) age? (*b*) citizenship? (*c*) residence?

8. State the length of term for which each of the following officers is respectively elected: (*a*) governor; (*b*) state senator; (*c*) secretary of state; (*d*) county judge; (*e*) sheriff.

DRAWING

1. What direction do all receding edges take, (*a*) that are above the eye? (*b*) that are below the eye?

2. In representation what are the comparative measurements of the vertical edges of a cube, front and rear?

3. What is a unit of design?

4. Make a working drawing of a vertical oblong tablet 2 in.×1 in.

5. Develop the surface (or make a pattern) of an inch cube.

6. Define and illustrate a perpendicular line.

7. Illustrate an oval.

8. Sketch five trees newly planted. The trees are of the same height, the same distance apart, in a row and at the left. The first tree is nearest, the fifth farthest away.

COMPOSITION.

Write a composition on one of the following subjects: How I Spent my Vacation; Manual Training; The Labor Problem; Diligence is the Mistress of Success.

GRAMMAR.

When Leonidas came to Thermopylæ, the Phœcians told him of the mountain path through the chestnut woods of Mount Ætna, and begged him to have the privilege of guarding it on a spot high up on the mountain side, assuring him that it was very hard to find at the other end, and that there was every probability that the enemy would never discover it. He consented, and, encamping around the warm springs, caused the broken wall to be repaired and made ready to meet the foe. CHARLOTTE M. YONGE.

The first seven questions refer to the above selection.

NOTES.—1. A combination of subject and predicate is called a clause. Clauses are principal or subordinate. 2 Subordinate clauses include (*a*) subject clauses; (*b*) objective clauses; (*c*) adjective clauses; (*d*) adverbial clauses. 3. In naming a clause, include only its unmodified subject and unmodified predicate. 4. A preposition with its object is called a phrase. 5. In naming a phrase, give only the preposition and its unmodified object. 6. A modifier may be a word, phrase, or clause. 7. An object of a transitive verb is classed as a modifier of that verb. 8. Only eight parts of speech are recognized,—the articles *the* and *a* forming a subdivision of adjectives and participles being one of the forms of verbs. 9. Infinitives are classed as modes of the verb. 10. In parsing a noun or pronoun, observe the following order: Class, person, number, gender, case. Give the reason for case. In parsing a relative pronoun, state the agreement with its antecedent. 11. In giving the syntax of a noun or pronoun, give only the case and the reason for it. 12. Treat verbs as divided into two classes only; viz., transitive and intransitive; a transitive verb may be used in the active or passive voice. 13. In parsing a verb, observe the following order: Principal parts, regular or irregular, transitive or intransitive, voice, mode, tense, person, number, agreement. Give the special use of an infinitive or a participle after tense.

1. Classify according to notes 1 and 2, the following clauses: (*a*) *Leonidas came;* (*b*) *Phœcians told and begged;* (*c*) *It was hard;* (*d*) *There was probability;* (*e*) *Enemy would discover.*

2. Select a clause in apposition with a noun.

3. Select three infinitives.

4. Select three participles.

5. Give two modifiers of *told.*

6. Give the syntax of (*a*) *guarding;* (*b*) *probability.*

7. State what each of the following modifies: (*a*) *on spot;* (*b*) *assuring;* (*c*) *ready.*

8. Write five nouns which are used only in the plural.

9. Give the conjugation of the verb *speak* in the past perfect (pluperfect) tense of the potential mode.

10. Write a sentence containing a relative pronoun of the first person, plural number, and nominative case.

PHYSIOLOGY AND HYGIENE.

1. How do the longer bones combine in their structure, lightness and strength?

2. What purpose is served by the contractility of muscles? What change of shape in a muscle accompanies its contraction?

3. Describe the pleura and state its office.

4. Upon which side of the heart is dark blood found?

5. How does gray nerve matter differ from white (*a*) in structure? (*b*) in function?

6. In what part of the ear are the small bones? What is the use of these bones?

7. Describe the choroid coat of the eyeball; explain its use.

8. Give the name and use of one kind of glands in the skin.

AMERICAN HISTORY.

1. What public document made the Charter Oak famous?

2. To what colony did each of the following persons respectively belong, (*a*) Miles Standish? (*b*) Roger Williams? (*c*) John Smith? (*d*) Wouter Von Twiller? (*e*) Oglethorpe?

3. What led to the adoption of the Declaration of Independence?

4. For what is Valley Forge especially remembered?

5. Who built the first steamboat that ran on the Hudson River? What was the name of the boat?

6. Give a brief account of the Lewis and Clarke expedition.

7. Name four presidents who were citizens of this state.

8. (*a*) What were the Alabama Claims? (*b*) What was the Geneva Award?

CURRENT TOPICS.

1. Who have been nominated for President and Vice-President by each of the two great political parties?

2. What has recently called attention to Homestead, Penn.?

3. Who has been recently appointed United States minister to Russia?

4. Mention two important positions previously held by him.

5. What important educational meetings were held at Saratoga Springs last month?

6. With what important international achievement was the name of Cyrus W. Field, recently deceased, closely associated?

7. Mention the legal holidays occurring before January 1, 1893.

8. Who was recently appointed Secretary of State vice James G. Blaine, resigned?

9. What was the result of the late general election in Great Britain and Ireland?

10. Mention the most prominent leader of each of the four great political parties participating in the above-mentioned election, and indicate to which party each belongs.

11. Briefly describe a volcanic disturbance of recent occurrence.

12. Who was appointed associate justice of the supreme court of the United states during the last week in July? Of what state is he a resident?

METHODS AND SCHOOL ECONOMY.

1. State two respects in which an ungraded school may be preferable to a strictly graded one.

2. Should books be used when the teaching of reading is commenced? If not, when should books be used?

3. State two important reasons why phonics should be be taught in connection with reading?

4. Should pupils be encouraged to spell words which they cannot pronounce in reading? Give reason for your answer.

5. Which should be taught first, the zones, or the tropics and polar circles? Why?

6. Name the kind of language lessons best adapted to overcome the timidity of young pupils, and secure free expression of thought?

7. Should pupils be taught to use marks of punctuation before they begin the study of grammar? Give reason for your answer.

8. In primary work when should you introduce fractions? How teach them objectively?

ANSWERS.

ARITHMETIC.

1. (*a*) 17 A. 3 sq. ch. 77 sq. l. (*b*) £5 12s. 8d. 2. $158.11. 3. $11,300. 4. 38 min. $17\frac{2}{3}$ sec. 5. 11.592 quarts. 6. $5\frac{1}{60}$. 7. 5 mo. 20 da. 8. (*a*) 58. (*b*) 641. (*c*) 1,899. (*d*) 1,050,004. 9. $5.88. 10. $\frac{7}{20}$.

GEOGRAPHY.

1. Land, water, air, plants, and animals.

2. A nearly spherical body flattened at the poles.

3. They mitigate the extremes of climate, increase the speed of vessels sailing in certain directions, and tend to keep the waters of the ocean in circulation.

4. Massachusetts Bay, Long Island Sound, Delaware Bay, Chesapeake Bay, Albemarle and Pamlico sounds.

5. (*a*) White Mountains. (*b*) Green Mountains. (*c*) Adirondacks, Catskills. (*d*) Alleghanies, Blue Mountains. (*e*) Blue Ridge Mountains.

6. (*a*) Connecticut. (*b*) Hudson. (*c*) Susquehanna. (*d*) Roanoke, Fear, Neuse, or Tar. (*e*) St. John's.

7. The German Empire, Switzerland, Italy, and Belgium.

8. (*a*) Cape Prince of Wales and East Cape. (*b*) Behring Strait.

9. (*a*) Chautauqua. (*b*) Clinton. (*c*) Answers may differ.

10. (*a*) Monarchy. (*b*) Monarchy. (*c*) Monarchy. (*d*) Monarchy. (*e*) Republic.

CIVIL GOVERNMENT.

1. Because the electors of the town come together in town meeting to transact public business.

2. Electors who are qualified to vote for members of the legislature.

3. (*a*) In United States courts. (*b*) United States Constitution.

4. Because export duties would tend to discourage productions and to cripple commerce.

5. (*a*) The legislative department. (*b*) Secretary of the Navy.

6. A majority of two thirds. The yeas and nays must be recorded on the journal.

7. (*a*) Thirty years of age. (*b*) Nine years a citizen of the United States. (*c*) He must be a resident of the state from which he is chosen.

8. (*a*) Three years. (*b*) Two years. (*c*) Two years. (*d*) Six years. (*e*) Three years.

DRAWING.

1. (*a*) Downward. (*b*) Upward.

2. The rear edges are always shorter.

3. A figure used for repetition in decoration.

GRAMMAR.

1. (*a*) Adverbial; (*b*) principal; (*b*) objective; (*d*) objective; (*e*) adjective.

2. *Enemy would discover.*

3. *To have, to find, to be repaired, (to be) made, to meet.*

4. *Guarding, assuring, encamping.*

5 Adverbial clause, *Leonidas came;* object, *him*, and the adverbial phrase *of path.*

6. (*b*) Object of the preposition *of.* (*b*) Subject of the verb *was*, nominative case.

7. (*a*) *Guarding.* (*b*) *Phœcians.* (*c*) *Wall.*

PHYSIOLOGY AND HYGIENE.

1. These bones consist of a hard shell, the interior being hollow or porous.

2. All motion produced by muscular contraction. When a muscle contracts it becomes shorter and thicker.

3. The pleura is a thin membrane enveloping the lungs. It secretes a fluid and prevents friction.

4. Upon the right side.

5. In structure, the gray matter is granular, the white is fibrous. In function, the gray matter originates or modifies, while the white transmits.

6. They are in the middle ear. Being solids they are good conductors of sound.

7. It is the dark inner coat of the eyeball. It serves to absorb the scattering rays of light.

AMERICAN HISTORY.

1. The Royal charter granted to the Connecticut colony, which was at one time hidden in the tree since known as the Charter Oak.

2. (*a*) Massachusetts. [*b*] Rhode Island. [*c*] Virginia. [*d*] New York. [*e*] Georgia.

3. Oppressive acts of the British government, including taxation without representation.

4. For the sufferings of the Revolutionary soldiers.

5. Robert Fulton. The Clermont.

6. It was an expedition sent out by President Jefferson, and commanded by Lewis and Clarke, for the purpose of exploring the continent to the Pacific Ocean. They went up the Missouri three thousand miles, then left their boats, crossed the Rocky Mountains, struck the Columbia River, and followed it to the Pacific Ocean.

7. Van Buren. Fillmore. Arthur. Cleveland.

8. [*a*] Claims against Great Britain for damages in flicted by the Alabama during the Civil War. [*b*] The amount awarded in payment of those claims, by a board of arbitrators which met at Geneva, in Switzerland.

CURRENT TOPICS.

1. *For President:* Republican, Benjamin Harrison; Democratic, Grover Cleveland. *For Vice-President:* Republican, Whitelaw Reid; Democratic, Adlai Ewing Stevenson.

2. The steel workers' strike there and resultant events.

3. Andrew D. White.

4. United States Minister to Germany, and president of Cornell University.

5. National Educational Association, and New York State Teachers' Association.

6. The first successful Atlantic cable.

7. Labor day, September 5; Columbus day, October 12; Discovery day, October 21; Thanksgiving day, probably, November, 24; and Christmas day, December 25.

8. John W. Foster.

9. The defeat of the Conservatives and Liberal-Unionists.

10. Gladstone, Liberal; Salisbury, Conservative; McCarthy, Nationalist; and Chamberlain, Liberal Unionist.

12. George H. Shiras, Jr., Pennsylvania.

METHODS AND SCHOOL ECONOMY.

1. A pupil may be advanced rapidly; individuality may be developed by more frequent contact with the eacher; other correct answers may be given.

2. No. Begin to use books as soon as the pupils read well from blackboards and charts.

3. To cultivate the vocal organs; to train the organs of hearing.

4. No. The continuity of thought is broken, and it would tend to produce drawling and monotonous tone in reading.

5. The tropics and polar circles. Because the location of the zones depends upon them.

6. Conversational lessons about familiar things.

7. Yes. Common use of the marks of punctuation is so simple that pupils can learn to use them readily.

8. Simple work in fractions may be introduced during the first year in school. By using common objects, apple, crayon, etc.

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